

How to see into the future (and perform other amazing feats)



VMware vSphere with
Operations Management

VMware vSphere with Operations Management Opinion White Paper

Virtualising infrastructure is a relatively straightforward task. As your organisations familiarity with it matures the volume of virtual machines in your environment grows, after all a few clicks of a mouse and 'hey-presto' you've deployed another virtual server. Sometimes referred to as VM Sprawl, this is a big headache for administrators and managers alike. VM's offer wonderful flexibility, but the ease of creation means that they can quickly spiral out of control.

Similarly, it's common for VM's to be overprovisioned (too much compute resource given over to them) or under-provisioned (too little), resulting in poor application performance and capacity utilisation across the environment. In fact, VMware estimate that **90% of the world's VM's are overprovisioned**. Therefore, unnecessary CAPEX is tied up in over-purchasing of hardware to accommodate worst-case scenario.

Whilst for many years, VMware left the job of capacity management to other third parties, quite frankly these solutions left too many questions unanswered and a hunger for deeper insight. Consequently, IT lacks the ability to dynamically measure, assign, and predict virtualised resources in response to changing demands of business and therefore the guesstimates we are left to make, simply led to poorly performing applications, ineffectual capacity management, and eventually service downtime.

Managed Virtualisation

A concept introduced by VMware to take control of VM sprawl and help organisations better manage their virtualised environment. Using vSphere with Operations Management or vSOM, you can achieve insight into your entire IT infrastructure – both physical and virtual resources.

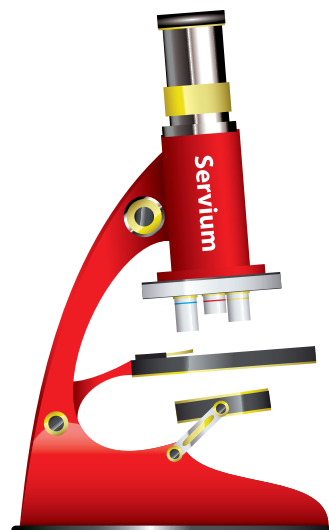
Learn more than ever

Whilst on the surface this may appear like nothing new, the levels of insight extend far beyond anything previously offered by third parties in the VMware ecosystem and indeed any management capabilities included in the entry-level vSphere offering.

It's only reasonable that a third party could never achieve the same levels of insight and automation that VMware, the creators of the hyper-visor could. And with patented analytics it really is a case of talking to the organ grinder not the monkey!

What is vSOM?

vSphere with Operations Management combines the world's leading virtualisation platform with best-in-class management capabilities. This new solution enables users to gain operational insight into a vSphere environment while optimising capacity.



VMware vSphere with Operations Management Opinion White Paper

The rich insight available in vSOM enables us to understand what is going on in the IT environment according to three metrics:

Health – the immediate challenges affecting your environment today. This is expressed by Workload, Anomalies and Faults.

Risk – future challenges. Typically, identifying the same challenges assessed in Health but looking at them from a different perspective. Variables like Time Remaining, Capacity Remaining and Stress are identified. For example will a data store run out of capacity shortly or does a physical host require more CPU power.

Capacity – Opportunities to optimise. Understand what is spare and unused and what is resource constrained across the infrastructure. Resources can then be reallocated to optimise density and achieve a better balance across the environment. The results are powerful and mean that the impact of virtualisation within your environment can be properly and accurately measured for the first time.

vSOM sits on top of your vSphere environment and gives you the insight and foresight to grow intelligently and plan properly. Things you didn't believe were possible, suddenly become achievable – you'll feel like you're performing IT miracles in no time. Here's how:

See the future

No more swivel-chair management tinkering with countless management tools trying to get the best out of your virtual estate. One single, centralised dashboard collects and analyses performance data, correlates abnormalities and identifies the root cause of performance issues.

'What if' analysis allows you to throw in new variables, consider unthinkable scenarios and evaluate how you would respond.

The operational insight obtained means you'll react to performance trends proactively and genuinely pre-empt problems before they occur.

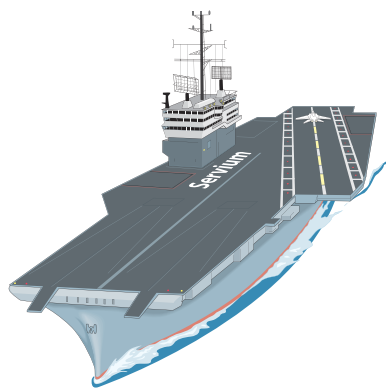


Self-learning analytics acquire knowledge of the specifics of your environment over time and indicate elements that might need attention before they become critical and with good time to remedy. vSOM really is precognition for your IT environment. This much visibility leads to improved utilisation of resources and enhanced capacity planning, making tough decisions over how to allocate precious resource easy, and budget preparation simple.

VMware vSphere with Operations Management Opinion White Paper

Make IT invincible

Integrated backup and recovery dramatically simplifies the process of safeguarding critical data as does protection from hardware and OS level failures to ensure zero data loss and zero downtime. Site wide protection thanks to replication of VM's from one location to another also automates protection in the event of a catastrophic failure. Zero planned downtime **enables maintenance to be joyfully performed without impacting critical applications**, so your IT team will have the freedom and time to perform the

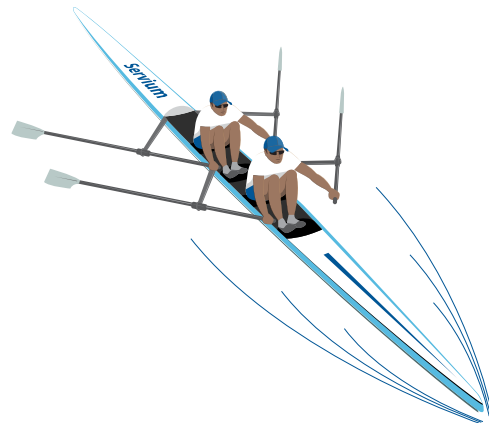


tasks they need to, whilst the business keeps running. For the first time you'll be making your IT environment invincible - ready to handle all eventualities and stay operational come what may.

Make IT more than the sum of its parts

vSOM provides a suite of tools that make recommendations on how best to utilise the resources in your environment and better support the most demanding applications. Working with everything at your disposal, you'll quite **literally make the sum of the whole, greater than the parts using a variety of clever innovations**. Automatically distribute application

load across available resources in your infrastructure to keep application demands in line with your business, reclaim virtual machines and unused capacity, right-size virtual machines at deployment and gain the confidence to virtualise more of



your tier one applications. Knowing what resources are being consumed and by what, will empower you to intelligently scale your environment and get more out of the resources at your disposal. You'll be in a better position to deliver your IT services, ensure availability and achieve the best possible performance.

Amplify the value of virtualisation...

The facts supporting vSOM speak for themselves:

Reduce downtime of applications by 36%

- By reducing the cost and complexity of managing business continuity and disaster recovery with always-on capabilities and layered protection against service outages or data loss.

Reduce diagnostic and problem resolution time by 26%

- See the problems before they occur, fix with shorter Mean Time to Resolve (MTTR) and meet improved service-level agreements (SLA's).

VMware vSphere with Operations Management Opinion White Paper

Improve capacity utilisation by 40% -

Get more out of your assets, by moving workloads around to best effect, use up under-utilised VM's and minimise further acquisition of hardware.



Improve consolidation ratios by 37% -

By eliminating waste in the environment and right-sizing resources for the most efficient deployment.

Reduce hardware costs by up to 30% -

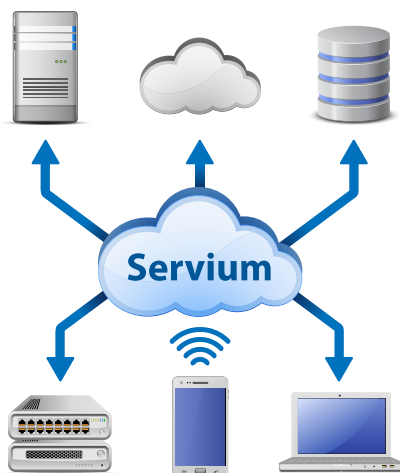
Fewer virtual machines, means less hardware and a reduction in associated costs.

Increase admin productivity by 60% -

Using vSOM a single administrator can be responsible for up to 80 VM's versus only 50 using traditional vSphere.

Double the IT cost savings of vSphere –

Amplify the value of vSphere by a factor of two.



Summary

For existing VMware vSphere users the case for upgrading to vSphere with Operations Management is clear cut - **for the small cost of upgrade, the insight, management attributes and savings it introduces are overwhelmingly favourable.**

Those who are yet to virtualise, of course need to consider the options. VMware vSphere is without question the most mature hyper-visor available and one we regularly recommend to our customers making their first-steps into virtualisation. Our position is in large part because of its proven pedigree, but also because of its simplicity to deploy. If you're new to virtualisation and are considering VMware, vSOM should be given serious consideration. Again, for a small uplift on cost even more substantial savings can be made from day one and in our opinion the management platform enables new users to establish good working practices with their virtual environment from the beginning and avoid many of the pitfalls other, more seasoned users have fallen foul of in past years.

Finally, regardless of whether you are new to virtualisation or an existing VMware user, management of your virtual environment must be considered in the context of the Software-Defined-Data Centre. Whether we like it or not, our data centres are becoming more 'software-defined' by the minute. It is our opinion that vSOM will be an important orchestrator in getting all of the data centre components to work together as a cohesive whole and help make steps you may wish to take towards delivering IT services through private or hybrid clouds.

What next?

If you would like to explore any of the considerations in this paper further, please get in touch as we would welcome the opportunity to help you better understand the benefits vSphere with Operations Management could bring to your organisation.

vSOM 101

Intrigued by vSOM but got some nagging questions? Get them answered by one of our experts in a no obligation, to-the-point, 15 minute question and answer session.

Download a Trial

If you're already a VMware vSphere user download a fully functional 60 day trial of vCenter with Operations Management Standard to try the technology out in your own environment.

Alternatively, if you're not a virtualisation user, download a fully functional 60 day trial of vSphere with Operations Management to get started.

www.vmware.com/go/tryvmware

Virtualisation Optimisation Assessment

This comprehensive assessment which will demonstrate the savings and gains your organisation could make using the technology.

What will I learn?

- See a full demonstration of vSphere with Operations Management
- Discover business suitability
- Evaluate deployment scenarios
- Receive best practice recommendations
- Obtain a deployment plan
- Get insight into upgrade services

About Servium

Servium provides IT infrastructure services for medium to large enterprises in both the private and public sector. We pride ourselves on delivering innovative solutions inspired by overcoming the day-to-day and strategic IT challenges of our customers. This is achieved by blending the best emerging technologies with professional customer service to answer these challenges and deliver economies previously not possible.

www.servium.co.uk
Tel: +44 (0)844 736 6155
hello@servium.co.uk



 @Servium_Ltd

 www.linkedin.com/company/servium

